

### Examination Method

**Minimum Qualifications Evaluation:** Employment applications for Chemist 1 will be reviewed to determine whether applicants meet the specified education and/or experience requirements, as well as any other necessary qualification requirements specified in the job posting for this job. **Applicants meeting the qualification requirements will be sent a testing admission notice advising them of the date by which they must take the written test if they wish to be considered for currently posted position vacancies.**

**Written Test:** To be eligible for employment consideration, qualified applicants must attain a passing score on the written test for Chemist 1. The written test takes approximately four (4) hours to complete.

### Test Content Summary

The written test for Chemist 1 consists of 100 multiple-choice questions divided into five test sections. Each test section has been designed to assess the knowledge, skills, and abilities required to effectively perform Chemist 1 job duties. The five test sections are:

**General Chemistry** - Questions assess an applicant's knowledge of basic general chemistry principles, including characteristics of acids and bases, terminology, laboratory procedures, and other related areas. (24 questions)

**Quantitative and Qualitative Chemistry** - Questions assess an applicant's knowledge of both quantitative and qualitative procedures; including gravimetric, colorimetric, and volumetric analysis, preparation of solutions, identification of unknowns, and other related topics. (27 questions)

**Instrumentation** - Questions assess an applicant's knowledge and familiarity with chromatography, spectrophotometry, basic laboratory equipment, calibration of instruments, and other topics related to chemical instrumentation. (20 questions)

**Organic Chemistry** - Questions assess an applicant's knowledge of basic organic chemistry, including extractions and separations, distillation procedures, classification of compounds, and other related topics. (14 questions)

**Mathematics and Measurement Conversions** - Questions assess ability to perform various calculations, as well as knowledge of some of the most important measurement conversions used by chemists. (15 questions)

### Testing Location Information

**Currently testing is conducted only at the Department of Human Resources office in Nashville.**

If alternate testing locations should become available, approved applicants will be notified of the alternate location which best matches their testing location preference (as indicated in employment application submitted for this job).